UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION III
1650 Arch Street
Philadelphia, Pennsylvania 19103-2029

SUBJECT: Toxicological Review of HW04 Data (R2) 2 July 2012
Dimock, PA

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On 24 May 2012, U.S. EPA collected a second round of samples from HW04 in Dimock. These samples were collected only from the wellhead, not the tap, because an alternate water supply is provided at this location. The samples were analyzed for 27 inorganic constituents; analytical results were validated and compared to risk-based screening levels and/or standards for public drinking water supplies. Findings in excess of these comparison concentrations are presented below.

Chromium

Chromium was detected in unfiltered and filtered wellhead samples at respective concentrations of 7.6 and 6.1 ug/L. The risk-based screening level for the most toxic form of chromium (hexavalent) is 3.1 ug/L. The concentrations observed in HW04 exceed this value by roughly two-fold, yielding an excess cancer risk in the 2E-04 range. Note, however, that the form of chromium detected in this sample is not known. If the reported concentrations represent the much less toxic trivalent form of chromium (with a risk-based screening level of 16,000 ug/L), then there is no risk associated with exposure.

A point worth mentioning is that samples collected from HW04 on 24 January 2012 (unfiltered and filtered) contained no detectable chromium.

No other constituents were detected at levels of concern in HW04.